



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-1027; Directorate Identifier 2013-NM-121-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 737-600, -700, 700C, -800, -900, and -900ER series airplanes. This proposed AD was prompted by a report of installation of incorrect wire support clamps within the left and right Environmental Control Systems (ECS) bay area during production, which is a flammable leakage zone. Use of incorrect wire support clamps that are not fully cushioned could allow electrical power wiring to come in contact with the exposed metal of the improper clamp, causing a short circuit and subsequent electrical arcing. This proposed AD would require inspecting to identify the part number of the wire support clamp, and related investigative and corrective actions if necessary. We are proposing this AD to prevent electrical arcing and a potential ignition source, which, in combination with flammable fuel vapors, could result in a fuel tank explosion, and consequent loss of the airplane.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Georgios Roussos, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6482; fax: 425-917-6590; email: [georgios.roussos@faa.gov](mailto:georgios.roussos@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2013-1027; Directorate Identifier 2013-NM-121-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

### **Discussion**

We received a report of the installation of incorrect wire support clamps within the left and right Environmental Control Systems (ECS) bay area during production, which is a flammable leakage zone. Use of incorrect wire support clamps that are not fully cushioned could allow electrical power wiring to come in contact with the exposed metal of the improper clamp, causing a short circuit and subsequent electrical arcing. We are proposing this AD to prevent electrical arcing and a potential ignition source, which, in combination with flammable fuel vapors, could result in a fuel tank explosion, and consequent loss of the airplane.

### **Related Rulemaking**

On November 18, 2010, we issued AD 2010-24-11, Amendment 39-16530 (75 FR 74616, December 1, 2010) for certain The Boeing Company Model 737-600, -700, -800, and -900 series airplanes. That AD required sealing the fasteners on the front end

rear spars inside the main fuel tank and on the lower panel of the center fuel tank, inspecting the wire bundle support installation in the equipment cooling system bays to identify the type of clamp installed, and determine whether the Teflon sleeve was installed, and doing related corrective actions if necessary.

On February 20, 2013, we issued AD 2013-04-11, Amendment 39-17369 (78 FR 14644, March 7, 2013) for certain The Boeing Company Model 737-600, -700, -800, and -900ER series airplanes. That AD required inspections to identify the part number of the wire support clamp, related investigative actions, and corrective actions if necessary.

#### **Relevant Service Information**

We reviewed Boeing Special Attention Service Bulletin 737-28-1312, dated April 19, 2013. For information on the procedures and compliance times, see this service information at <http://www.regulations.gov> by searching for Docket No. FAA-2013-1027. The related investigative actions include an eddy current inspection of the wing front spar for cracking and a detailed inspection of the bolt forward of the wing front spar upper chord for cracking or missing bolts. The corrective actions include repairing cracking and replacing bolts with new bolts.

#### **FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

#### **Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in the service information described previously. The phrase "related investigative actions" is used in this proposed AD. "Related investigative actions" are those actions that are identified as follow-on actions that are: (1) related to the primary action, and (2) are

on-condition actions that further investigate the nature of any condition found. Related investigative actions could include, for example, inspections.

In addition, the phrase “corrective actions” is used in this proposed AD.

“Corrective actions” are those actions that are on-condition actions that correct or address any condition found. Corrective actions could include, for example, repairs, removal and replacement, and modifications.

#### **Clarification of Applicability in Paragraph (c) of this Proposed AD**

The NOTE specified in Paragraph 1.A., “Effectivity,” of Boeing Special Attention Service Bulletin 737-28-1312, dated April 19, 2013, is in error. It does not impact the Variable Number list in paragraph 1.A.1. of that section. Therefore, for the applicability of this proposed AD, we have referred to the Variable Number list in paragraph 1.A.1., “Effectivity,” in paragraph (c) of this proposed AD.

#### **Costs of Compliance**

We estimate that this proposed AD affects 519 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

##### **Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Inspection	6 work-hours X \$85 per hour = \$510	\$0	\$510	\$264,690

We estimate the following costs to do any necessary related investigative and corrective actions that would be required based on the results of the proposed inspection. We have no way of determining the number of aircraft that might need these actions.

##### **On-condition costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
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<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
Related investigative and corrective actions	1 work-hour X \$85 per hour = \$85	\$3	\$88

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

We have received no definitive data that would enable us to provide cost estimates for the on-condition repair of chafed or damaged wiring specified in this proposed AD.

#### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

#### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States,

or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**The Boeing Company:** Docket No. FAA-2013-1027; Directorate Identifier 2013-NM-121-AD.

#### **(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to The Boeing Company Model 737-600, -700, 700C, -800, -900, and -900ER series airplanes; certificated in any category; having a Variable Number identified in paragraph 1.A.1., Effectivity, of Boeing Special Attention Service Bulletin 737-28-1312, dated April 19, 2013.

**(d) Subject**

Air Transport Association (ATA) of America Code 28, Fuel System.

**(e) Unsafe Condition**

This AD was prompted by a report of installation of incorrect wire support clamps within the left and right Environmental Control Systems (ECS) bay area during production, which is a flammable leakage zone. Use of incorrect wire support clamps that are not fully cushioned could allow electrical power wiring to come in contact with the exposed metal of the improper clamp, causing a short circuit and subsequent electrical arcing. We are issuing this AD to prevent electrical arcing and a potential ignition source, which, in combination with flammable fuel vapors, could result in a fuel tank explosion, and consequent loss of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Inspection and Related Investigative and Corrective Actions**

Within 60 months after the effective date of this AD: Do a detailed inspection to determine if a wire support clamp having part number (P/N) TA0930034-10, TA0930034-10P, TA0930034-11, or TA0930034-12P is installed, and do all applicable related investigative and corrective actions before further



flight, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-28-1312, dated April 19, 2013.

**(h) Parts Installation Prohibition**

As of the effective date of this AD, no person may install a wire support clamp on any airplane within the ECS area defined in the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-28-1312, dated April 19, 2013, unless the clamp has P/N TA0930034-10, TA0930034-10P, TA0930034-11, or TA0930034-12P.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (j)(1) of this AD. Information may be emailed to: [9-ANM-Seattle-ACO-AMOC-Requests@faa.gov](mailto:9-ANM-Seattle-ACO-AMOC-Requests@faa.gov).

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(j) Related Information**

(1) For more information about this AD, contact Georgios Roussos, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6482; fax: 425-917-6590; email: [georgios.roussos@faa.gov](mailto:georgios.roussos@faa.gov).

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680;

Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on December 4, 2013.

John P. Piccola,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service

[FR Doc. 2013-29593 Filed 12/11/2013 at 8:45 am; Publication Date: 12/12/2013]